WHAT DOES EXPECTANCY-VALUE THEORY HAVE TO SAY ABOUT MOTIVATION AND ACHIEVEMENT IN TIMES OF CHANGE AND UNCERTAINTY?

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ABSTRACT

We discuss the development of achievement motivation from the perspective of Eccles and colleagues’ expectancy-value theory (EVT), focusing on the importance of children developing positive expectancies for success and valuing of achievement to help them cope with change and uncertainty. Although research has shown that, overall, children’s expectancies and values decline, recent studies show many different trajectories in the overall pattern. Children’s expectancies and values predict their school performance and choices of which activities to pursue in and out of school, with these relations getting stronger as children get older. When children’s expectancies and values stay more positive, they can better cope with change and uncertainty, such as the increasing difficulty of many school subjects, or broader changes such as immigrating to a new country. Parents can buffer children’s experiences of change and uncertainty by encouraging them to engage in different activities and by providing them opportunities to do so. Parents’ positive beliefs about their children’s abilities and discussing with them the importance of school can moderate the observed decline in children’s ability beliefs and values. For immigrant and minority children, parents’ emphasis on the importance of school and encouragement of the development of a positive sense of their racial/ethnic identity are critical buffers. Positive teacher—child
relations also are a strong buffer, although research indicates that immigrant and minority children often have less positive relations with their teachers. We close with a discussion on recent EVT-based intervention research that shows how children’s beliefs and values for different school subjects can be fostered.

Keywords: Expectancy-value theory; development of motivation; immigrant and migrant children; socialization at home and school

As the editors of this volume Gonida and Lemos discuss in their introduction/overview, children around the world are growing up during a time of great global change, economic challenges in many countries, and immigration of many children from their home countries to countries around the world. The editors note that these changes can create a variety of uncertainties that young people currently face. Examples include uncertainties about how well they will do in a new school environment, whether education will give them better job prospects and brighter economic futures, and whether they (immigrant children and/or minority children) will be accepted by adults who will have a large impact on their lives (such as teachers), most of whom will be from the majority group in a given country. Gonida and Lemos note in their introduction that children’s motivation can impact their capacity to cope with both change and uncertainty.

In this chapter, we discuss the role of constructs and processes from one major theory of motivation, expectancy-value theory (EVT; Eccles, 2009; Eccles-Parsons et al., 1983; Wigfield, Tonks, & Klauda, 2016) in helping children to cope with change and uncertainty in certain aspects of their lives, particularly their experiences and outcomes in school. Expectancy-value theorists focus on two fundamental issues: (1) the nature of children’s motivational beliefs, values, and goals for different activities, how they change over time, and how they impact both performance on the activity and choices made regarding whether to continue with them; and (2) how socialization practices in the home and school influence children’s developing expectancies, values, and goals (see Eccles-Parsons et al., 1983; Wigfield et al., 2016).

We organize the chapter as follows. First, we discuss how children’s motivational beliefs and values develop, predict their performance and choice of activities in different areas, and help them deal with change and uncertainty. We focus in particular on how minority or immigrant status in the USA can create uncertainties with respect to children’s experiences and outcomes in school, such as the nature of their relations with their teachers, their grades, and whether they should continue in school. We next discuss parents’ socialization practices and teacher–student relations and how they can impact children’s developing motivation, as well as buffer negative effects of change and uncertainty, or perhaps exacerbate them. Then, we discuss recent intervention work on how to enhance students’ motivational beliefs, values, and school achievement. We finish with suggestions for future research.
EXPECTANCY-VALUE THEORY: AN OVERVIEW

We focus in this chapter primarily on Eccles’ and colleagues’ (e.g., Eccles, 2005, 2009; Eccles-Parsons et al., 1983; Wigfield & Eccles, 1992; Wigfield, Rosenzweig, & Eccles, 2017; Wigfield et al., 2016) expectancy-value model of performance and choice as it has guided most of the expectancy-value research that has been done in a variety of countries over the last 30 years. In their theorizing and research, Eccles and her colleagues have focused on how expectancies, values, and their determinants influence choice, persistence, and performance. They also have examined the developmental course of children’s expectancies and values. They initially developed the model to help explain gender differences in mathematics expectancies and values and how these influenced boys’ and girls’ choices of mathematics courses and majors. The gender differences in part were based on challenges girls faced (and often still face) in math classrooms, so the theory is quite germane to helping us understand how children cope with challenges and uncertainty.

Eccles-Parsons et al. (1983) proposed that individuals’ expectancies and values directly influence performance and task choice. Their expectancies and values themselves are influenced by their task-specific beliefs such as their beliefs about their competence, and their goals and self-schema, along with their affective memories for different achievement-related events. These beliefs, goals, and affective memories are influenced by individuals’ perceptions of other peoples’ attitudes and expectations for them and by their own interpretations of their previous achievement outcomes. Children’s perceptions and interpretations are influenced by a broad array of social, personal, and cultural factors. These include socializers’ (especially parents and teachers but also peers) beliefs and behaviors, children’s prior achievement experiences and aptitudes, and the cultural milieu in which they live. Wigfield and colleagues (2016) provide a detailed review of recent research based in EVT, and Tonks, Wigfield, and Eccles (in press) discuss the model’s applicability to children’s development in different cultures.

Defining the Expectancy, Value, and Ability Belief Constructs in the Model

Eccles-Parsons et al. (1983) defined expectancies for success as children’s beliefs about how well they will do on an upcoming task (e.g., how well do you think you will do in math next year?). Ability (or competence) beliefs are children’s evaluations of their current competence or ability, both in terms of their assessments of their own ability and also how they think they compare to other students. Although Eccles and colleagues distinguished these two beliefs theoretically, they strongly overlap empirically (Eccles & Wigfield, 1995). Thus, in this chapter, we will use these terms interchangeably, for the most part.

Eccles and her colleagues define values with respect to the qualities of different tasks and/or subject areas and how those qualities influence the individual’s
desire to do the task (Eccles, 2005; Eccles-Parsons et al., 1983; Wigfield & Eccles, 1992). Eccles-Parsons et al. (1983) proposed that individuals’ overall subjective task values are positively influenced by three components: attainment value or importance, intrinsic value, and utility value (UV) or usefulness of the task, and negatively influenced by one component: cost (see Eccles-Parsons et al., 1983; Wigfield & Eccles, 1992; Wigfield et al., 2017, for more detailed discussion of these). Eccles-Parsons et al. defined attainment value as the importance of doing well on a given task. Attainment value incorporates identity issues; tasks are important when individuals view them as central to their own sense of themselves, or allow them to express or confirm important aspects of the self (Eccles, 2009). Intrinsic value is the enjoyment one gains from doing the task. When children intrinsically value an activity, they often become deeply engaged in it and can persist at it for a long time. This component is similar in certain respects to notions of intrinsic motivation and interest (see Ryan & Deci, 2016; Schiefele, 2009). UV or usefulness refers to how a task fits into an individual’s future plans, for instance, taking a math class to fulfill a requirement for a science degree. In certain respects, UV is similar to extrinsic motivation (Ryan & Deci, 2016), because when doing an activity out of UV, the activity is means to an end rather than an end in itself. However, the activity also can reflect some important goals that the person holds deeply, such as attaining a certain occupation.

In contrast to these three generally positive influences, perceived cost negatively influences individuals’ overall valuing of an activity because it is what the individual has to give up to do a task (e.g., do I do my math homework or spend time on Instagram?), as well as the anticipated effort one will need to put into task completion (is working this hard to get an A in math worth it?), among other things. Eccles-Parsons et al. (1983) emphasized that cost is especially important to choice because choosing one activity and investing time in it means that other potentially valued activities can’t be done. The research on cost has burgeoned in the last 10 years (see Wigfield et al., 2017, for a detailed discussion). We return to its impact on children’s experiences of uncertainty and change later.

Development of Children’s Expectancy Beliefs and Task Values

Researchers in many different countries have found that the normative pattern of change in children’s expectancies and values is declining (see Wigfield et al., 2015, for review). Many young children (but not all; see Heyman, Dweck, & Cain, 1992) are quite optimistic about their competencies in different areas, and this optimism changes during middle childhood to greater realism and (sometimes) pessimism for many children. Researchers have also shown that there are different trajectories in children’s competence beliefs and values, with some showing increases during the high school years, indicating that the normative pattern does not capture the trajectories of all children (Archambault, Eccles, & Vida, 2010; Musu-Gillette, Wigfield, Harring, & Eccles, 2015). However, most of these trajectories show decline as well; particularly relevant to this chapter is
Archambault et al.’s finding that children whose literacy competence beliefs and value declined most included boys and students of lower socioeconomic status (SES). To date, there has been very little work on the development of perceived costs of different activities. Along with the normative decline, researchers (e.g., Eccles et al., 1989; Wigfield et al., 1997) showed that children’s beliefs and values become more stable over time. For example, Eccles et al. showed that the correlation of sixth-grade children’s math ability beliefs with their beliefs at seventh grade was 0.52; Wigfield et al. showed the same correlation for second- and third-grade children was 0.27.

**Relations of Children’s Expectancies and Values to Performance and Choice**

Many studies done in different countries show that children, adolescents, and adults’ expectancies for success and achievement values predict various achievement outcomes and choices of which activities to do (e.g., Bong, Cho, Ahn, & Kim, 2012; Musu-Gillette et al., 2015; Trautwein et al., 2012). Students’ expectancies for success and beliefs about ability are among the strongest direct psychological predictors of performance. Students’ subjective task values directly predict both intentions and actual decisions regarding persisting during different activities, such as taking mathematics and English courses. Because children’s expectancies and values relate positively to each other, their expectancies indirectly influence choice, and values do so for performance. Several researchers have found that cost negatively predicts adolescents’ and college students’ achievement, plans to take AP courses, and plans to pursue science careers or graduate school in general (Kirkpatrick, Chang, Lee, Tas, & Anderman, 2013; Perez, Cromley, & Kaplan, 2014). Finally, work by Nagengast, Trautwein, and their colleagues (e.g., Nagengast et al., 2011; Trautwein et al., 2012) showed that there are interactions of children and adolescents’ expectancies and values on their school performance. Nagengast et al. found these interactions in samples of adolescents from around the world.

The relations between children’s expectancies and values and indicators of performance strengthen across the school years (Simpkins, Davis-Kean, & Eccles, 2006; Wigfield et al., 1997). Importantly, they also extend over time (Musu-Gillette et al., 2015; Simpkins, Fredricks, Davis-Kean, & Eccles, 2006). For instance, Musu-Gillette et al. (2015) found that students’ valuing of math measured in elementary school predicted their college major choice. Simpkins et al. (2006) found that children’s participation in math and science activities in late elementary school related to their subsequent expectancies and values in these areas, which in turn predicted the number of math and science courses they took through high school. The findings that the strength of these relations increase across age and extend over time could mean that positive expectancies and values increasingly could buffer children’s responses to challenges they face, and negative ones leave children more vulnerable over time; we discuss this in more detail in the next section.
Expectancies and Values as Buffers against Change and Uncertainty

We believe children and adolescents’ expectancies and values both separately and together can impact the way they deal with change and uncertainty. First, when children develop and maintain positive expectancies and values for different school subjects, they are more likely to succeed in them and continue to take classes in these subject areas even as they become more challenging and difficult (e.g., how math gets increasingly difficult at different levels of complexity). Continuing success on these activities will strengthen children’s expectancies for further success, and likely their valuing of them as well, reducing uncertainties children might have about whether they can keep moving forward in math. Ultimately, children’s positive beliefs and values and continuing success will help them complete secondary school, and more broadly to understand that education is important and will gain them brighter futures.

The opposite occurs for children with low expectancies for success and valuing of different school subjects; for them as classes become more difficult, their uncertainties about whether they can handle the material will increase. These uncertainties likely lead children to stop taking classes that they think are too difficult, and perhaps even to drop out of school, because school “costs” too much in terms of time and effort (Alexander, Entwisle, & Kabbani, 2001; Archambault, Janosz, Fallu, & Pagani, 2009). So children’s expectancies and values can “buffer” (or fail to buffer) the impact of dealing with activities as they change to become more challenging and reduce (or not reduce) their uncertainty about being able to handle the material; these processes have consequences for their broader valuing of school and its potential benefits for them. Children whose expectancies and values for different school subjects decline strongly over the school years likely are most vulnerable to challenging circumstances and may be increasingly uncertain about what lies ahead for them.

Second, children’s ability to balance their expectancies and values for different activities so that they are in synchrony with one another can buffer the impact of change and uncertainty. Harter (1990), following James (1892), proposed and found that when children have low expectancies for success for activities they continue to value they are at risk for low self-esteem and even depression. One way for children to have expectancies and values that are in sync is to strengthen the value they hold for activities at which they are competent (see Eccles, 2009). Having “in sync” expectancies and values provide further buffering of children’s experiences of change and uncertainty, buffering that likely is stronger than the effects of each alone, and certainly stronger than situations in which their expectancies and values are not in sync.

Another way to be “in sync” is for children and adolescents who have low expectancies for success for certain school subjects to devalue them. Harter (1990) and Eccles (2009) both discuss how having low expectancies for and doing poorly on academic areas that individuals devalue does not lower their self-esteem. However, for some children, especially those from groups who have been discriminated against in a given culture, this devaluing can lead to disidentification with school, or deciding that school achievement is not an important
part of how they define themselves (see Murdock, 2009, for discussion of the work on disidentification in African-American students at different levels of education). Unfortunately, these children and adolescents’ disidentification with school may make it more likely that they will disengage from school and ultimately, drop out. Dropping out of course has many negative consequences for adolescents’ economic futures, among other things (Finn, 1989).

Are there social influences that can also impact the development of children’s expectancies and values? How parents and teachers influence children’s expectancies and values, and their coping with change and uncertainty is the topic of the next section.

**PARENTS AND TEACHERS’ ROLES AS BUFFERS IN CHILDREN’S RESPONSES TO CHANGE AND UNCERTAINTY**

In this section, we discuss how parents’ beliefs regarding their children’s skills and their interactions with their children can either buffer the impact of change and uncertainty on children or worsen the challenges many children face. We also discuss the impact of students’ relations with teachers on their dealing with change and uncertainty.

*The Role of Parents*

We begin this section with a brief discussion of EV theorists’ perspective on how parents’ beliefs and behaviors impact their children’s own competence beliefs and research findings on these topics.¹ Eccles-Parsons et al. (1983; see also Eccles, 1993) proposed that parents’ perceptions of their children’s competencies directly impact children’s own competence beliefs and values. She and her colleagues (e.g., Wigfield et al., 2015) discussed a variety of ways in which parents can positively impact children’s motivation and achievement (see also Simpkins et al., 2006). EVT researchers have found that parents’ encouragement of their children to participate in different activities, opportunities they provide for their children, time spent with them and provision of materials used for learning mediate the relationship between parent and family characteristics and child outcomes such as achievement and motivation in school (see Simpkins, Fredricks, & Eccles, 2015; Wigfield et al., 2015). For instance, LeFevre et al. (2009) found that parents’ active involvement with their children positively impacts their children’s motivation and achievement. Simpkins, Fredricks, and Eccles (2012) showed that children whose parents provide more learning materials in the home are more likely to have higher ability beliefs, values, and achievement in various domains. However, many parents, particularly low-SES parents from both majority and minority groups in a culture, often have limited resources to provide such materials and activities to their children.

Parents’ beliefs are influenced by their perceptions of their own children but often follow cultural stereotypes. For example, Fredricks, Simpkins, and Eccles (2005) and Simpkins et al. (2015) found that parents perceive their sons as
having more ability in math than their daughters and also provide their sons and daughters with different opportunities to participate in various activities based solely on their gender. Simpkins and colleagues (2015) showed that these “gendered”-specific beliefs are consistent and strong predictors of student motivation and achievement, even when other variables such as children’s actual competence are controlled.

Researchers have shown that there are cultural differences in the relations of parents’ beliefs and practices to their children’s outcomes (Fan, Williams, & Wolters, 2012; X. Fan & Chen, 2001). For example, W. Fan and colleagues (2012) found that parental advising and parent—school communication was positively related to Hispanic students’ English self-efficacy and intrinsic motivation, but negatively related to Asian American student’s mathematics intrinsic motivation and self-efficacy. Therefore, there likely are cultural differences in which parenting practices can buffer or hinder their children’s reactions to changing circumstances and uncertainties (see Tonks et al., in press, for further discussion).

Turning specifically to how parents may buffer their children’s experiences of challenge and uncertainty, Fredricks and colleagues (2005) found that parents with positive ability beliefs for their children’s math, reading, and sports abilities while the children are in early elementary school can help buffer the decline that has been so often observed in children’s motivational beliefs and values. One way in which ethnic minority parents’ socialization practices can act as a buffer during times of uncertainty, such as when the family immigrates to a new country, is by encouraging their child to develop a strong sense of racial or ethnic identity. Students who develop a strong sense of identity are more likely to stay engaged and motivated in school (Murdock, 2009; Wigfield et al., 2015; see also Kaplan, this volume). A strong sense of racial or ethnic identity can help buffer the effects of discrimination and protect their self-worth (Wong, Eccles, & Sameroff, 2003). Further, children who have developed a strong sense of ethnic/racial identity are potentially less likely to view academic achievement as a costly activity due to things such as stereotype threat. Additionally, having a strong identity can mitigate the effects of one’s peers’ sometimes negative reactions to their valuing of high achievement in school (Murdock, 2009; Wigfield et al., 2015); this is the social dimension of cost we discussed earlier.

Many people immigrate to a new country for economic and educational opportunities (Perreira, Chapman, & Stein, 2006; Suárez-Orozco et al., 2010). Thus, these parents likely place a high value on their children’s education and are likely to transmit this valuing to their children through various activities. For example, parents who talk about the long-term benefits of their children’s schooling are likely to have children who put in more effort and value school more than children whose parents do not relay these types of messages (Ceballo, Jocson, & Francheska, 2017). Interestingly, Stanat and Christenson (2006) found, using the PISA 2003 data, that immigrant adolescents in many countries had higher competence beliefs and interest in math than did the native adolescents. One possible reason for this could be because of the messages immigrant children receive from their parents affirming their ability to do well in school.
Interestingly, it is first-generation immigrant children who have more positive motivational beliefs and values. By contrast, in what some researchers call the “immigrant paradox,” many second-generation immigrants actually have lower motivation and achievement, despite in all likelihood being more acculturated into the majority culture in the country to which they immigrated (Marks, Ejesi, & García Coll, 2014). Researchers and policy-makers still are working to understand the processes behind this paradox.

Parents’ beliefs and socialization practices can also help buffer the negative effects of economic insecurity. Research has demonstrated that children in high-SES families perform better academically and typically have more positive competence beliefs and values for school (Mahoney, Vandell, Simpkins, & Zarrett, 2009). This is likely because of the ease of access high-SES families have to resources and opportunities, as well as parents’ own educational experiences and success (e.g., most will have themselves attended college). Such parents often are more comfortable in school settings and know how to help their children be successful in school. However, low-SES parents’ socialization practices can help offset some of the negative effects of living in poverty. For example, parent involvement at the school level may be difficult for some low-SES parents due to time limitations because of working multiple jobs and language barriers. However, socialization practices at home can moderate these effects; one example is providing games and other educational materials (if they are able to) that promote math skills, or skills in other areas (LeFevre et al., 2009; Motti-Stefandi & Masten, 2017).

### The Roles of Teachers

Our discussion of schooling’s impact on students’ developing expectancies and values has to be constrained due to space limitations; see Roeser, Urdan, and Stephens (2009) for an extended discussion regarding the many different aspects of schooling’s impact on students’ motivation and achievement. We focus here on teacher—student relations.

When teachers support students emotionally and instrumentally, they have higher expectations for success, more positive social and academic goals, value school more, and are more willing to engage in school activities (see Wentzel, 2016 for review). These relations emerge even when children’s relations with peers and parents are taken into account. Teachers’ relations with students are crucial to students’ early adjustment in school (Birch & Ladd, 1998), and the importance of such relations continues into middle and high school. Goodenow (1993) reported that middle school students’ perceptions of support from teachers and their sense of belongingness in their classrooms related strongly to their perceived valuing of the schoolwork in which they were engaged. Such relationships may be particularly important for children who do not have positive relations with their parents. Positive relations with teachers can make up for the lack of emotional and other kinds of support at home, at least in part. However, research done in the USA shows that the development of these positive teacher—student relations can be difficult for some groups. Children from
some minority groups (e.g., African-American children) generally have more difficult relations with their (mostly white) teachers, and again positive relations with one or more teachers could make up for the more general problem of difficult teacher—student relations (Jussim, Robustelli, & Cain, 2009; Murdock, 2009; Wentzel, 2009, 2016).

One aspect of teacher—student relations that can impact children’s developing motivation is teachers’ expectations for students’ success (see Jussim et al., 2009, for review). Jussim et al. noted that teachers’ expectations are for the most part accurate in the sense of how strongly they relate to students’ achievement. However, they also discuss how these expectations can act as self-fulfilling prophecies; when teachers expect students to do well they often do end up doing better, and when teachers expect students to do poorly, they tend to do so. Further, Weinstein and her colleagues (Mckown & Weinstein, 2008; Weinstein, Marshall, Sharp, & Botkin, 1987) showed that even in the early elementary grades, children are aware of teachers’ expectancies for different students, and how teachers treat students for whom they have high and low expectancies differently.

Jussim et al. (2009) noted that although the effect sizes for how strongly teachers’ expectancies act as self-fulfilling prophecies are relatively weak overall, they are much stronger for children from lower-SES backgrounds and for African-American students. One reason for this could be (as discussed earlier) that children from lower-SES backgrounds and ethnic minority students often perceive their relations with their teachers as less positive, with this perception getting stronger as students move through school.

The decline in many children’s motivational beliefs and values as they go through school are particularly large for students who are doing poorly (either emotionally or academically) in school (see Eccles & Roeser, 2009). The early adolescent time period can be a particularly difficult time for these children. Wigfield et al. (2015) and others discussed how the multiple changes that occur during this time period (e.g., puberty, school transitions, changing relations with parents, increasing concern with identity) likely have an impact on students’ motivation and achievement (see Eccles & Roeser, 2009; National Research Council (NRC), 2004 for more detailed discussion). With respect to teacher—student relations, because middle and high schools are much larger than elementary schools (at least in the USA), teachers have many more students in their classes and so it is more difficult for them to get to know their students. Thus, during early adolescence and adolescence when children need emotional and instrumental help from adults, teachers may be less able to play these roles because of the constraints imposed by schools’ organization and structure during these critical developmental periods. As a result, they may be less able to buffer the impact of change and uncertainty during adolescence.

Many ethnic minority children and children from low-SES households report having high perceptions of ability in various domains, even when doing poorly in school (Shernoff & Schmidt, 2008; Stanat & Christenson, 2006). One reason for this could be positive messages these children are receiving from their parents. However, it could also be due to their relations with their teachers. Ethnic
minority children and those coming from low-SES households are more likely to experience additional stress and challenges in their home-lives (Spencer & Markstrom-Adams, 1990). Thus, these particular children may view being in school as less stressful than being at home due to them having an organized schedule while at school and receiving attention and supervision from teachers and other adults in school settings (Shernoff & Schmidt, 2008). However, the interactions these students have with their teachers and others in the school would need to be positive in order to be most beneficial for students’ expectancies and values, which in turn can buffer the negative impact of uncertainties on them.

As discussed earlier positive teacher—student relations and teacher expectancies for students can foster students’ expectancies and values and, by extension, also buffer the impact of negative influences such as stereotypes about a group’s likely poor performance and actual discrimination (Goodenow, 1993; Murdock, 2009; Wentzel, 2016). Unfortunately, in the USA, this is less likely to happen for poor children and those from some minority groups, notably African-American and Latino children. Relations between the mostly white teacher population and minority group children overall are less positive than are teachers’ relations with Caucasian and Asian American students. The same is true for their expectancies (concerning both their academic achievement and in-school behavior) for poor children and African-American children’s school performance. Indeed, children (especially boys) from these groups often receive much harsher discipline practices than do children from other groups and are far more likely to be suspended from school (Skiba & Knesting, 2001).

Moreover, research has shown that African-American and poor children are more likely to perceive that they face educational barriers, and this becomes even truer as children go through school. For instance, Taylor and Graham (2007) studied how African-American and Latino children’s perceptions that they did not have good teachers and faced other educational barriers impacted the value they attached to school (measured as which kinds of other children they admired, including high or low achievers). They found that children’s perceptions of both educational and occupational barriers to their success increased across age, were higher for boys than for girls, and (for African-American children) perceptions of these barriers related to their devaluing of achievement.

The research demonstrating that many ethnic minority children and children from low-SES backgrounds are less likely to have positive relationships with their teachers is discouraging in many ways with respect to whether teachers can help buffer the negative effects of uncertainty and change on these students. On a more positive note, research has shown that having one or two teachers with whom these students believe they have positive relationships, and feeling supported by these teachers both academically and socially can make a huge difference in their academic lives, and more general psychological adjustment (e.g., Furrer & Skinner, 2003; Wentzel, 2016).

There also are other ways in which teachers can help buffer the negative effects of change and uncertainty for these and other children. For example, teachers can design instruction to be relevant and interesting for these students.
Research has demonstrated that when students perceive their schoolwork to be meaningful and interesting they have an increase in motivation to learn (Albrecht & Karabenick, 2018; Roeser, Eccles, & Sameroff, 2000). We will next discuss interventions that have been used in the classroom to enhance children’s expectancies and values, and by extension, help them to deal with change and uncertainty in their academic lives.

INTERVENTIONS TO ENHANCE CHILDREN’S EXPECTANCIES AND VALUES

Over the last 15 years, intervention work designed to enhance the students’ motivation has flourished; much of this work is theoretically grounded in EVT and also in Bandura’s (1997) social cognitive theory, with its construct of self-efficacy that is similar in many respects to the expectancy for success/ability beliefs constructs in EVT. Schunk and Ertmer (2000) concluded from their review of the research on self-efficacy interventions that they have promoted both students’ self-efficacy and performance on different academic tasks and subject areas. Researchers basing their work in EVT have done a variety of intervention studies designed to enhance students’ achievement values in different academic subjects (see Harackiewicz & Priniski, 2016, for review). Many of these studies have been conducted in the tradition of the “brief” social psychological interventions designed to enhance students’ motivation (Yeager & Walton, 2011). Finally, Albrecht and Karabenick’s (2018) special issue of the Journal of Experimental Education reviews of intervention studies on enhancing students’ sense of the relevance of what they are learning; relevance, of course, relates to students’ task values.

Researchers implementing EVT-based brief interventions primarily have focused on enhancing adolescents’ UV for Science, Technology, Engineering, and Mathematics (STEM) courses in STEM fields (see Harackiewicz & Priniski, 2016; Lazowski & Hulleman, 2016; Rosenzweig & Wigfield, 2016; for more complete reviews). Due to space limitations, we provide just a few examples of this work here. Hulleman and Harackiewicz (2009) and Hulleman, Godes, Hendricks, and Harackiewicz (2010) did intervention studies in which they had one group of high school or college students write a brief essay, either once in the lab or in class every three or four weeks, about the relevance of what they were learning to their lives. Results showed that (relative to a control group) the intervention boosted students’ UV and interest in the topics they were learning, as well as their achievement; there were also stronger effects for students who started with low expectations for their performance.

Gaspard et al. (2015) designed an intervention program to enhance ninth-grade German students’ math achievement values. It consisted of students either writing a brief essay connecting math to their lives or reading and responding to quotations from fellow students about the relevance of math. Compared to a control condition, students in both intervention conditions reported higher UV for math, but the effects were stronger in the quotation condition than in the essay condition.
In a study quite important to the themes of this chapter, Harackiewicz, Canning, Tibbetts, Priniski, and Hyde (2016) gave a UV intervention and a values affirming (VA) intervention (i.e., an intervention asking students what values were most important to them) to college students in an introductory biology class. The sample included majority and minority students whose families had attended college, first-generation majority and minority college students, and first-generation, underrepresented minority students. The UV intervention focused on enhancing students’ sense of the relevance of the subject matter by having them write about the course’s relevance to their goals. The value affirmation intervention had no effects on students’ performance in the course. The UV intervention was effective for all the students in the study. More importantly, the combined first-generation, underrepresented group’s performance increased the most, meaning that the achievement gap between the other students in the class and this group was reduced the most. This finding is particularly important because this group had the lowest prior college GPA. Harackiewicz et al. suggested that the UV intervention worked because it helped connect students’ values and goals, such as wanting to help others, to the course material. They concluded that brief UV interventions may be effective ways to reduce the achievement gap in STEM courses. The results of this study hold great promise for enhancing certain minority group’s students’ school performance, as well as their beliefs that they can succeed in college, and that it is valuable for them. In other words, these students’ uncertainties about whether they can succeed in college would be reduced following the intervention.

**CONCLUSION**

We hope we have convinced the readers of this volume that positive expectancies and values for different achievement activities can buffer the effects of change and uncertainty; that is, when children have positive expectancies and values, they can cope better with change and deal more effectively with uncertainties. The work showing that as children’s expectancies and values become more stable (in the sense of correlating more strongly over time) bodes well for those who have developed and maintained positive expectancies and values for activities they deem important, and whose values are in synchrony with the values held in the larger society in which they live. Unfortunately, this same stability is not good news for adolescents whose expectancies and values for school achievement and other activities are low; one implication of the greater stability in children and adolescents’ expectancies and values is that it will take more work to change them to be more positive.

Fortunately, the research we reviewed here on parents and teachers’ influences on children’s developing expectancies and values shows that both of these key socializers can foster positive growth in children’s motivation. Similarly, the success of brief motivation interventions in enhancing students’ motivation and achievement is encouraging with respect to helping more children stay positively motivated in school. However, we still have much to learn about the processes by which these interventions positively affect students’ outcomes.
As is the case in many areas of research in psychology, we still know less about how parents and teachers impact some ethnic minority students and immigrant students’ expectancies and values than we do about these socializers’ influences on majority group children. Similarly, with the notable exception of the Harackiewicz et al. (2016) study, most of the motivation intervention studies to date have not focused on either ethnic minority students or (especially) immigrant children.

Further, as we discussed previously, first-generation immigrants tend to have more positive motivational beliefs and values than second-generation immigrants or children who have lived in the country for most of their lives. Future work is needed to better understand this “immigrant paradox”; specifically how parents and teachers of first-generation immigrant children help them to develop and maintain these motivational beliefs and values over time, and why these potential buffering effects do not hold for second-generation immigrant children. We believe research on these topics is another very important priority for the next decade of research based on EVT.

NOTE

1. The literature on parents’ influences on children’s motivation is voluminous and so can’t be covered here; see Grolnick, Friendly, and Bellas (2009) and Pomerantz and Thompson (2008) for reviews.

REFERENCES


